

## In the Claims

1. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;

further connected to a visual display unit hardware device which displays the computer programmed to produce a graphical user interface for representing and facilitating user manipulation of persistent yet revocable access control settings for a specific predetermined visual digital document comprising:

one or more display regions ~~on the display unit~~ for graphical representations of all persistent yet revocable access control settings for the specific predetermined visual digital document, wherein the graphical representations result from transformations applied to the structured data which defines the access control settings for the document; and

a display region ~~on the display unit~~ for normal size, legibly scaled, unabridged representation of the content of the document;

wherein the set of display regions for representations of the access control settings and the display region for representation of the content of the document are concurrently visible, are concurrently operable, and appear to the operator as in an integrated graphical user interface.

2. (Currently amended) The ~~visual display unit~~ computer of claim 1, wherein one or more functions modify the spatial layout of the display regions for representations of the access control settings.

3. (Currently amended) The ~~visual display unit~~ computer of claim 1, wherein one or more functions modify the number of the display regions for representations of the access control settings.

4. (Currently amended) The ~~visual display unit~~ computer of claim 1, wherein one or more functions modify the transformations that are applied to the structured data.

5. (Currently amended) The ~~visual display unit~~ computer of claim 1, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

6. (Currently amended) The ~~visual display unit~~ computer of claim 5, wherein the likeness comprises, at least in part, a digital photograph, processed by a method including at least one step selected from

the set of: adjusting image color saturation toward a predetermined target saturation level; converting to grayscale; adjusting image brightness toward a predetermined target brightness level; adjusting image contrast toward a predetermined target contrast level; adjusting image sharpness toward a predetermined target sharpness level; and masking with a shape selected from a set comprising ovals and outlines of a bust.

7. (Currently amended) The ~~visual display unit~~ computer of claim 1, wherein the set of display regions comprises a display region for a graphical representation of the result of transforming the set of groups, users and roles and their respective access privileges into a corresponding set of individual users and their respective effective access privileges.

8. (Currently amended) The ~~visual display unit~~ computer of claim 1, further comprising a first display region for a graphical representation of at least one set of known users and groups, wherein the operator can designate indicia for known users and groups and visually associate the designated indicia with a second display region to change the structured data which defines the access control settings for the document.

9. (Currently amended) The ~~visual display unit~~ computer of claim 8, wherein the first display region is reduced in size until activated by the user, and the first display region is increased in size upon activation.

10. (Canceled)

11. (Currently amended) The ~~visual display unit~~ computer of claim 45, wherein the set of individual users consists of: the set of users who have any access privilege at all for the document; and the set of users who have accessed the document in the past although they currently are without any access privilege for the document.

12.-27. (Canceled)

28. (Currently amended) The ~~visual display unit~~ computer of claim 45, wherein graphical representations of users are sorted by one or more of the following attributes:

the time of the most recent access by the user;

the time of the most recent write access by the user; and

current privileges the user has for the document.

29. (Currently amended) The ~~visual display unit~~ computer of claim 45, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

30. (Currently amended) The ~~visual display unit~~ computer of claim 46, wherein the set of individual users consists of: the set of users who have any access privilege at all for the document; and the set of users who have accessed the document in the past although they currently are without any access privilege for the document.

31. (Currently amended) The ~~visual display unit~~ computer of claim 46, wherein graphical representations of users are sorted by one or more of the following attributes:

the time of the most recent access by the user;

the time of the most recent write access by the user; and

current privileges the user has for the document.

32. (Currently amended) The ~~visual display unit~~ computer of claim 46, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

33. (Currently amended) The ~~visual display unit~~ computer of claim 8, wherein the set further comprises access control settings macros and the operator can designate indicia for macros and visually associate the designated indicia with the second display region to change the structured data which defines the access control settings for the document.

34. (Currently amended) The ~~visual display unit~~ computer of claim 33, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

35. (Canceled)

36. (Currently amended) The ~~visual display unit~~ computer of claim 7, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

37. (Canceled)

38. (Currently amended) The ~~visual display unit~~ computer of claim 8, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

39. (Canceled)

40. (Currently amended) The ~~visual display unit~~ computer of claim 30, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.
41. (Currently amended) The ~~visual display unit~~ computer of claim 40, wherein the likeness comprises, at least in part, a digital photograph, processed by a method including at least one step selected from the set of: adjusting image color saturation toward a predetermined target saturation level; converting to grayscale; adjusting image brightness toward a predetermined target brightness level; adjusting image contrast toward a predetermined target contrast level; adjusting image sharpness toward a predetermined target sharpness level; and masking with a shape selected from a set comprising ovals and outlines of a bust.
42. (Currently amended) The ~~visual display unit~~ computer of claim 31, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.
43. (Currently amended) The ~~visual display unit~~ computer of claim 38, wherein the first display region is reduced in size until activated by the user, and the first display region is increased in size upon activation.
44. (Currently amended) The ~~visual display unit~~ computer of claim 7, wherein the set of display regions comprises a display region for a graphical representation of the set of groups, users and roles defined by existing structured data for the document and their respective access privileges.
45. (Currently amended) A digital computer comprising at least:
- a processing unit connected to memory;
  - further connected to a visual display unit hardware device which displays , the computer programmed to produce a graphical user interface for representing access log information and access control settings for a single specific predetermined digital document comprising:
    - a display region ~~on the display unit~~ containing a graphical representation of a set comprising a plurality of individual users wherein each of the individual users is graphically represented essentially at most one time by a visual element which comprises:
    - a representation of the identity of the individual user;

a differing visual element for indicating if the user for the single specific predetermined digital document has privilege different than having read privilege;

indication whether there has been any access at all by the user to the document; and

one or more of the following visual elements:

representation of the time of the most recent read access by the user to the document;

representation of the time of the most recent write access by the user to the document;

indication whether the most recent write access by the user to the document is the most recent write access by any user to the document;

indication whether the most recent read access by the user to the document has been before or since the most recent write access by any user to the document.

46. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;

further connected to a visual display unit hardware device which displays, the computer programmed to produce a graphical user interface for representing content, access log information, and access control settings for a specific predetermined visual digital document comprising:

a display region ~~on the display unit~~ for normal size, legibly scaled, unabridged representation of the content of the specific predetermined visual digital document; and

a display region containing a graphical representation of a set comprising a plurality of individual users wherein each of the individual users is graphically represented essentially at most one time by a visual element which comprises:

a representation of the identity of the individual user;

a differing visual element for indicating if the user for the document has privilege different than having read privilege;

indication whether there has been any access at all by the user to the document; and

one or more of the following visual elements:

representation of the time of the most recent read access by the user to the document;

representation of the time of the most recent write access by the user to the document;

indication whether the most recent write access by the user to the document is the most recent write access by any user to the document;

indication whether the most recent read access by the user to the document has been before or since the most recent write access by any user to the document;

wherein the display region for representation of the set of users and the display region for representation of the content of the document appear to the operator as an integrated graphical user interface.

47. (Currently amended) The ~~visual display unit~~ computer of claim 46, wherein the display region for representation of the set of users and the display region for representation of the content of the document are concurrently visible and are concurrently operable.

48. (Currently amended) The ~~visual display unit~~ computer of claim 47, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

49. (Currently amended) The ~~visual display unit~~ computer of claim 48, wherein the set of individual users consists of: the set of users who have any access privilege at all for the document; and the set of users who have accessed the document in the past although they currently are without any access privilege for the document.

50. (Currently amended) The ~~visual display unit~~ computer of claim 49, wherein graphical representations of users are sorted by one or more of the following attributes:

the time of the most recent access by the user;

the time of the most recent write access by the user; and

current privileges the user has for the document.

51. (Currently amended) The ~~visual display unit~~ computer of claim 40, wherein graphical representations of users are sorted by one or more of the following attributes:

the time of the most recent access by the user;

the time of the most recent write access by the user; and

current privileges the user has for the document.

52. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;

further connected to a visual display unit hardware device which displays the computer programmed to produce a graphical user interface for representing and facilitating user manipulation of persistent yet revocable access control settings for a specific predetermined Portable Document Format document comprising:

one or more display regions ~~on the display unit~~ for graphical representations of all persistent yet revocable access control settings for the specific predetermined Portable Document Format document, wherein the graphical representations result from transformations applied to the structured data which defines the access control settings for the document; and

a display region ~~on the display unit~~ for normal size, legibly scaled, unabridged representation of the content of the document;

wherein the set of display regions for representations of the access control settings and the display region for representation of the content of the document are concurrently visible, are concurrently operable, and appear to the operator as in an integrated graphical user interface.

53. (Currently amended) The ~~visual display unit~~ computer of claim 52, wherein the set of display regions comprises a display region for a graphical representation of the result of transforming the set of groups, users and roles and their respective access privileges into a corresponding set of individual users and their respective effective access privileges.

54. (Currently amended) The ~~visual display unit~~ computer of claim 52, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

55. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;

further connected to a visual display unit hardware device which displays, the computer programmed to produce a graphical user interface for representing access log information and access control settings for a single specific Portable Document Format document comprising:

a display region ~~on the display unit~~ containing a graphical representation of a set comprising a plurality of individual users wherein each of the individual users is graphically represented essentially at most one time by a visual element which comprises:

a representation of the identity of the individual user;

a differing visual element for indicating if the user for the single specific predetermined Portable Document Format document has privilege different than having read privilege;

indication whether there has been any access at all by the user to the document; and

one or more of the following visual elements:

representation of the time of the most recent read access by the user to the document;

representation of the time of the most recent write access by the user to the document;

indication whether the most recent write access by the user to the document is the most recent write access by any user to the document;

indication whether the most recent read access by the user to the document has been before or since the most recent write access by any user to the document.

56. (Currently amended) The ~~visual display unit~~ computer of claim 55, wherein the set of individual users consists of: the set of users who have any access privilege at all for the document; and the set of users who have accessed the document in the past although they currently are without any access privilege for the document.

57. (Currently amended) The ~~visual display unit~~ computer of claim 55, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

58. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;



further connected to a visual display unit hardware device which displays, the computer programmed to produce a graphical user interface for representing content, access log information, and access control settings for a specific predetermined Portable Document Format document comprising:

a display region ~~on the display unit~~ for normal size, legibly scaled, unabridged representation of the content of the specific predetermined Portable Document Format document; and

a display region containing a graphical representation of a set comprising a plurality of individual users wherein each of the individual users is graphically represented essentially at most one time by a visual element which comprises:

a representation of the identity of the individual user;

a differing visual element for indicating if the user for the document has privilege different than having read privilege;

indication whether there has been any access at all by the user to the document; and

one or more of the following visual elements:

representation of the time of the most recent read access by the user to the document;

representation of the time of the most recent write access by the user to the document;

indication whether the most recent write access by the user to the document is the most recent write access by any user to the document;

indication whether the most recent read access by the user to the document has been before or since the most recent write access by any user to the document;

wherein the display region for representation of the set of users and the display region for representation of the content of the document appear to the operator as an integrated graphical user interface.

59. (Currently amended) The ~~visual display unit~~ computer of claim 58, wherein the set of individual users consists of: the set of users who have any access privilege at all for the document; and the set of

users who have accessed the document in the past although they currently are without any access privilege for the document.

60. (Currently amended) The ~~visual display unit~~ computer of claim 59, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

61. (Currently amended) The ~~visual display unit~~ computer of claim 58, wherein the display region for representation of the set of users and the display region for representation of the content of the document are concurrently visible and are concurrently operable.

62. (Currently amended) The ~~visual display unit~~ computer of claim 61, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

63. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;

further connected to a visual display unit hardware device which displays , the computer programmed to produce a graphical user interface for representing and facilitating user manipulation of persistent yet revocable access control settings for a specific predetermined visually compound digital text document comprising:

one or more display regions ~~on the display unit~~ for graphical representations of all persistent yet revocable access control settings for the specific predetermined visually compound digital text document, wherein the graphical representations result from transformations applied to the structured data which defines the access control settings for the document; and

a display region ~~on the display unit~~ for normal size, legibly scaled, unabridged representation of the content of the document;

wherein the set of display regions for representations of the access control settings and the display region for representation of the content of the document are concurrently visible, are concurrently operable, and appear to the operator as in an integrated graphical user interface.

64. (Currently amended) The ~~visual display unit~~ computer of claim 63, wherein the set of display regions comprises a display region for a graphical representation of the result of transforming the set of

groups, users and roles and their respective access privileges into a corresponding set of individual users and their respective effective access privileges.

65. (Currently amended) The ~~visual display unit~~ computer of claim 63, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.

66. (Currently amended) A digital computer comprising at least:

a processing unit connected to memory;

further connected to a visual display unit hardware device which displays, the computer programmed to produce a graphical user interface for representing content, access log information, and access control settings for a specific predetermined visually compound digital text document comprising:

a display region ~~on the display unit~~ for normal size, legibly scaled, unabridged representation of the content of the specific predetermined visually compound digital text document; and

a display region containing a graphical representation of a set comprising a plurality of individual users wherein each of the individual users is graphically represented essentially at most one time by a visual element which comprises:

a representation of the identity of the individual user;

a differing visual element for indicating if the user for the document has privilege different than having read privilege;

indication whether there has been any access at all by the user to the document; and

one or more of the following visual elements:

representation of the time of the most recent read access by the user to the document;

representation of the time of the most recent write access by the user to the document;

indication whether the most recent write access by the user to the document is the most recent write access by any user to the document;

indication whether the most recent read access by the user to the document has been before or since the most recent write access by any user to the document;

wherein the display region for representation of the set of users and the display region for representation of the content of the document appear to the operator as an integrated graphical user interface.

67. (Currently amended) The ~~visual display unit~~ computer of claim 66, wherein the set of individual users consists of: the set of users who have any access privilege at all for the document; and the set of users who have accessed the document in the past although they currently are without any access privilege for the document.
68. (Currently amended) The ~~visual display unit~~ computer of claim 67, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.
69. (Currently amended) The ~~visual display unit~~ computer of claim 66, wherein the display region for representation of the set of users and the display region for representation of the content of the document are concurrently visible and are concurrently operable.
70. (Currently amended) The ~~visual display unit~~ computer of claim 69, wherein a user is graphically represented by a display element comprising, at least in part, a likeness of the user.